National Cancer Institute

A Snapshot of Bladder Cancer

Incidence and Mortality

While urinary bladder cancer incidence is much higher in whites than in African Americans, mortality rates are only slightly higher, due in large part to the later stage at diagnosis among African Americans. Incidence and mortality rates for Hispanics and Asians/Pacific Islanders are lower than those for whites and African Americans. Overall incidence and mortality rates have changed very little for most racial and ethnic groups over the past 20 years, with the exception of African Americans, for whom mortality has been decreasing. Incidence rates of bladder cancer are about four times higher in men than in women. Since 1998, mortality rates have been stable in men and slowly declining in women.

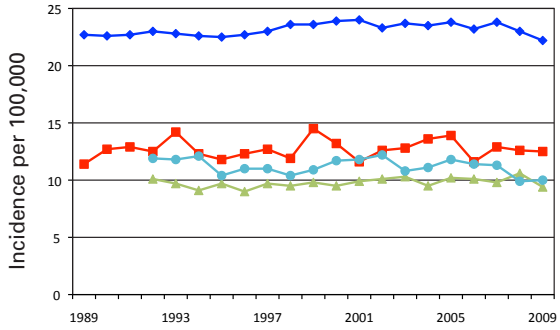
Smoking is the most important risk factor for bladder cancer. Other risk factors include exposure to chemicals in the workplace (rubber, paint, hairdressing supplies), certain chemotherapy drugs, and arsenic contamination in drinking water. There is no standard or routine screening test for bladder cancer, but two tests, cystoscopy and urine cytology, may be used in patients who have previously had bladder cancer. Standard treatments for bladder cancer are surgery, radiation therapy, chemotherapy, and biological therapy.

It is estimated that approximately $4.0 billion[1] is spent in the United States each year on bladder cancer treatment.

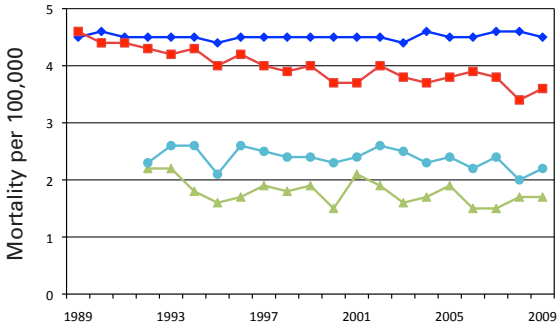
Source for incidence and mortality data: Surveillance, Epidemiology, and End Results (SEER) Program and the National Center for Health Statistics. Additional statistics and charts are available at the SEER Web site.

[1] Cancer Trends Progress Report, in 2010 dollars.

U.S. Bladder Cancer Incidence*



U.S. Bladder Cancer Mortality*



* Insufficient data available for time trend analysis for American Indians/Alaska Natives.
** Incidence and mortality data not available before 1992.

Trends in NCI Funding for Bladder Cancer Research

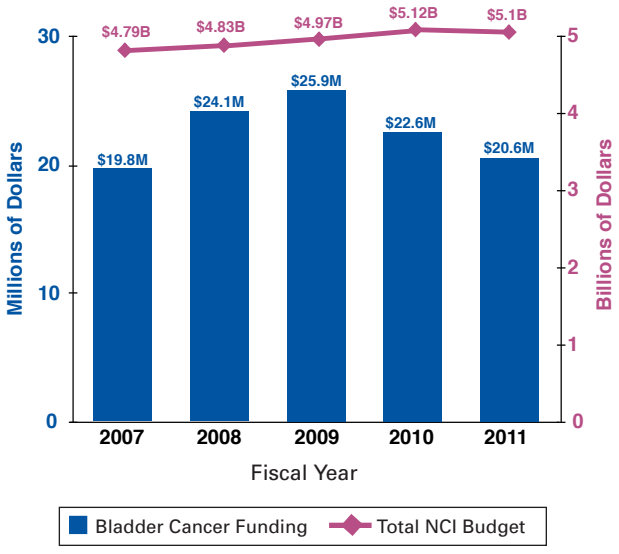
The National Cancer Institute's (NCI) investment[2] in bladder cancer research increased from $19.8 million in fiscal year (FY) 2007 to $25.9 million in FY 2009 before decreasing to $20.6 million in FY 2011. In addition to this funding, NCI supported $3.1 million in bladder cancer research in FY 2009 and 2010 using funding from the American Recovery and Reinvestment Act (ARRA).[3]

Source: NCI Office of Budget and Finance.

[2] The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research planning and budgeting at the National Institutes of Health (NIH), see About NIH.

[3] For more information regarding ARRA funding at NCI, see Recovery Act Funding at NCI.

NCI Bladder Cancer Research Investment



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

If you are reading a paper copy of this Snapshot: PDF Snapshots with hyperlinks to additional information and resources can be found online at: http://www.cancer.gov/aboutnci/servingpeople/cancer-statistics/snapshots

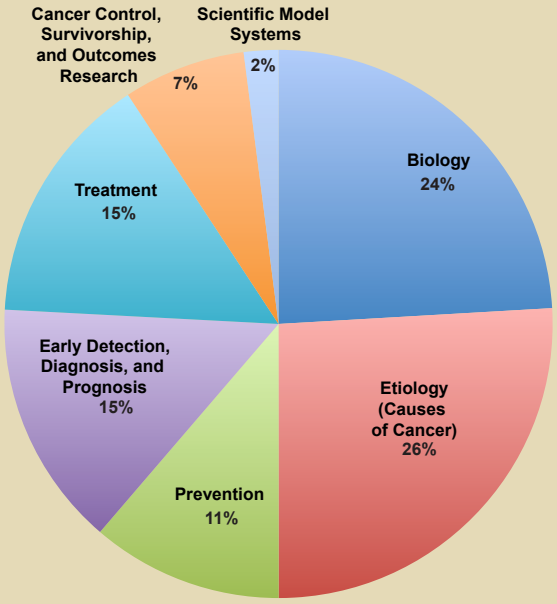
Examples of NCI Activities Relevant to Bladder Cancer

- The **Prostate and Urologic Cancer Research Group** conducts and supports clinical trials, biomarker discovery, and technology development for the prevention and early detection of prostate and bladder cancers.
- The **Mouse Models of Human Cancers Consortium (MMHCC)** has developed several bladder cancer models that are available to the research community.
- The **New England Bladder Cancer Study** is exploring why mortality rates for bladder cancer are higher in New England compared with the rest of the country. Investigators are examining whether drinking well water contaminated with arsenic or smoking fewer cigarettes over a long period of time compared with smoking more cigarettes over a shorter period of time are related to higher bladder cancer rates.
- Investigators participating in the **International Consortium of Bladder Cancer** coordinate research activities and pool data across ongoing and completed bladder cancer epidemiology studies.
- The **Prevention Agents Program** provides scientific and administrative oversight for chemoprevention agent development from preclinical research to early phase I studies. The program currently is supporting research on several agents for potential chemoprevention of bladder cancer.
- One bladder-cancer-specific **Specialized Program of Research Excellence (SPORE)** is studying the early detection of bladder cancer, new therapeutic strategies, and the epidemiology of bladder cancer recurrence.

Additional Resources for Bladder Cancer

- The **What You Need To Know About™ Bladder Cancer** booklet discusses possible causes, symptoms, diagnosis, treatment, and rehabilitation for bladder cancer. Information specialists also can answer questions about cancer at 1-800-4-CANCER.
- The NCI **Bladder Cancer Home Page** provides up-to-date information on bladder cancer treatment, prevention, genetics, causes, screening, testing, and related topics.
- Information on treatment options for bladder cancer is available from **PDQ**, NCI's comprehensive cancer database.
- **Clinical trials for bladder cancer** can be found in NCI's list of clinical trials.

NCI Bladder Cancer Research Portfolio



Percentage of Total Dollars by Scientific Area
Fiscal Year 2011

Data source: NCI Funded Research Portfolio. Only projects with assigned scientific area codes are included. A description of relevant research projects can be found on the NCI Funded Research Portfolio Web site.

Selected Advances in Bladder Cancer Research

- An analysis **identified several genes involved in one DNA repair pathway** associated with altered bladder cancer risk. Published June 2011.
- Linked SEER-Medicare data indicate that patients with bladder cancer who received at least one-half of the **recommended surveillance and treatment strategies had decreased mortality**, indicating that increasing compliance via systematic quality improvement initiatives could improve bladder cancer outcomes. Published August 2011.
- A cohort study found that **bladder cancer risk associated with smoking** among men and women is higher than previously estimated. Published August 2011.
- Researchers **identified three bladder cancer subtypes** based on differentiation state and discovered a potential new prognostic biomarker. Published January 2012.
- Click here to access selected free full-text journal articles on advances in NCI-supported research relevant to bladder cancer. Click here to search for additional scientific articles or to complete a search tutorial on PubMed.